

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

60. -- 77. (Canceled)

78. (New) A method of generating signals for transmission to a node in a communication system, the method comprising:

storing a set of binary spreading-code sequences at a first device;

modulating a plurality of portions of stored information with corresponding selected subsets of the stored set onto a sinusoidal electromagnetic carrier, wherein the subsets correspond to nodes in a multi-node communication network, and further wherein at least one subset of the selected subsets contains a plurality of the binary spreading-code sequences; and

transmitting the modulated carrier from the first device to a corresponding node of the multi-node communication network.

79. (New) The method of claim 78, further comprising assigning the plurality of portions of stored information to the corresponding subsets of the stored set.

80. (New) The method of claim 79, wherein the plurality of portions of stored information are blocks of bits.

81. (New) The method of claim 80, wherein the blocks of bits are of equal fixed length.

82. (New) The method of claim 80, wherein the blocks of bits are simultaneously transmitted from the first device to the corresponding node.

83. (New) The method of claim 78, further comprising generating the set of binary spreading-code sequences corresponding to nodes in the multi-node communication network at the first device.

84. (New) The method of claim 83, further comprising assigning the plurality of portions of stored information to the corresponding subsets of the stored set.

85. (New) The method of claim 78, wherein the stored set comprises combined contents of specified stages of a first binary shift register and a second binary shift register.

86. (New) The method of claim 78, wherein each of the corresponding selected subsets of the stored set comprises two binary spreading-code sequences.

87. (New) The method of claim 86, wherein the two binary sequences are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, and by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, wherein the first carrier signal and the second carrier signal have the same frequency and are out of phase with respect to each other.

88. (New) The method of claim 78, wherein each of the corresponding selected subsets of the stored set comprises three binary spreading-code sequences.

89. (New) The method of claim 88, wherein the three sequences are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, and by modulating a third binary sequence onto a third sinusoidal electromagnetic carrier signal, wherein the first carrier signal, the second carrier signal, and the third carrier signal have the same frequency and are out of phase with respect to each other.

90. (New) The method of claim 78, wherein each of the corresponding selected subsets of the stored set comprises four binary spreading-code sequences.

91. (New) The method of claim 90, wherein the four sequences are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, by modulating a third binary sequence onto a third sinusoidal electromagnetic carrier signal, and by modulating a fourth binary sequence onto a fourth sinusoidal electromagnetic carrier signal, wherein the first carrier signal, the second carrier signal, the third carrier signal, and the fourth

carrier signal have the same frequency and are out of phase with respect to each other.

92. (New) A device comprising:

a modulator configured to modulate a plurality of portions of stored information with subsets selected from a stored set of binary spreading-code sequences onto a sinusoidal electromagnetic carrier, wherein the subsets correspond to nodes in a multi-node communication network, and further wherein at least one subset of the selected subsets contains a plurality of the binary spreading-code sequences; and

an antenna configured to transmit the modulated carrier to a corresponding node of the multi-node communication network.

93. (New) The device of claim 92, further comprising a symbol selection unit configured to assign the plurality of portions of stored information to the corresponding subsets of the stored set.

94. (New) The device of claim 93, wherein the plurality of portions of stored information are blocks of bits.

95. (New) The device of claim 94, wherein the blocks of bits are of equal fixed length.

96. (New) The device of claim 94, wherein the blocks of bits are simultaneously transmitted from the first device to the corresponding node.

97. (New) The device of claim 92, further comprising a sequence generator configured to generate the set of binary spreading-code sequences corresponding to nodes in the multi-node communication network at the first device.

98. (New) The device of claim 92, wherein the stored set comprises combined contents of specified stages of a first binary shift register and a second binary shift register.

99. (New) The device of claim 92, wherein each of the corresponding selected subsets of the stored set comprises two binary spreading-code sequences.

100. (New) The device of claim 99, wherein the two binary sequences are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal

electromagnetic carrier signal, and by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, wherein the first carrier signal and the second carrier signal have the same frequency and are out of phase with respect to each other.

101. (New) The device of claim 92, wherein each of the corresponding selected subsets of the stored set comprises three binary spreading-code sequences.

102. (New) The device of claim 101, wherein the three sequences are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, and by modulating a third binary sequence onto a third sinusoidal electromagnetic carrier signal, wherein the first carrier signal, the second carrier signal, and the third carrier signal have the same frequency and are out of phase with respect to each other.

103. (New) The device of claim 92, wherein each of the corresponding selected subsets of the stored set comprises four binary spreading-code sequences.

104. (New) The device of claim 103, wherein the four sequences are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, by modulating a third binary sequence onto a third sinusoidal electromagnetic carrier signal, and by modulating a fourth binary sequence onto a fourth sinusoidal electromagnetic carrier signal, wherein the first carrier signal, the second carrier signal, the third carrier signal, and the fourth carrier signal have the same frequency and are out of phase with respect to each other.